

# TRANSMITTAL FORM

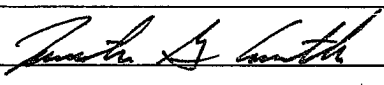
(to be used for all correspondence after initial filing)

		Application Number	09/994,560
		Filing Date	November 27, 2001
		First Named Inventor	Harold L. Bennett
		Group Art Unit	1714
		Examiner Name	Cephia D. Toomer
Total Number of Pages in this Submission	10	Attorney Docket Number	31088-2

## ENCLOSURES (check all that apply)

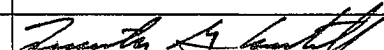
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment Response to Final O.A. <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input checked="" type="checkbox"/> Extension of Time Request (1 month) <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Documents <input type="checkbox"/> Response to Missing Parts/ Incomplete Application Revised Cover Sheet <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.16 (l) and 1.52(c).	<input type="checkbox"/> Assignment Papers and recordation form <input type="checkbox"/> Drawing(s) (3) Redlined to show changes <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> To Convert a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Additional Enclosure (please identify below)
Remarks		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual Name	Quentin G. Cantrell Woodard, Emhardt, Naughton, Moriarty & McNett
Signature	
Date	May 15, 2003

## Certificate of Mailing

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Typed or printed name	Quentin G. Cantrell		
Signature		Date	May 15, 2003

EXHIBIT

A

tabbles\*

# FEE TRANSMITTAL FOR FY 2003

Patent fees are subject to annual revision.  
Transmitted Via Facsimile to: 703-746-4176

## Complete if Known

Application Number 09/994,560  
Filing Date November 27, 2001  
First Named Inventor Harold L. Bennett  
Group Art Unit 1714  
Examiner Name Cephia D. Toomer  
Attorney Docket Number 31088-2

Total Amount of Payment (\$55.00)

### METHOD OF PAYMENT

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

#### ☒ Deposit Account:

Deposit Account Number 23-3030  
Deposit Account Name Woodward, Emhardt, Moriarty, McNett & Henry LLP

The Commissioner is authorized to: (check all that apply)

- ☒ Charge fee(s) indicated below ☐ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application, excluding the payment of issue fees  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

### FEE CALCULATION

#### 1. BASIC FILING FEE

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility Filing Fee	
1002	330	2002	165	Design Filing Fee	
1003	520	2003	260	Plant Filing Fee	
1004	750	2004	375	Reissue Filing Fee	
1005	160	2005	80	Provisional Filing Fee	
SUBTOTAL (1) (\$)					

#### 2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee From Below	Fee Paid
-20** =		X	
Independent Claims -3** =		X	
Multiple Dependent			

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1201	84	2201	42	Claims in excess of 20
1203	280	2203	140	Independent claims in excess of 3
1204	84	2204	42	Multiple dependent claim, if not paid
1205	18	2205	9	**Reissue independent claims over original patent
				**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\*\*or number previously paid, if greater; For Reissues, see above

### FEE CALCULATION (continued)

#### 3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner's Action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner's Action	
1251	110	2251	55	Extension for reply within first month	55.00
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Petitions related to provisional applications	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	
Other Fee (specify)					
* Reduced by Basic Filing Fee Paid					
SUBTOTAL (3) (\$)					55.00

#### SUBMITTED BY

Name (Print/Type)

Quentin G. Cantrell

Registration No.

47,469

(Attorney/Agent)

Telephone

(317) 634-3456

Signature

*Quentin G. Cantrell*

Date

May 15, 2003

# REQUEST FOR EXTENSION OF TIME

Atty. Docket No. 31088-2

Serial No. 09/994,560

Applicant Harold L. Bennett

Filing Date  
November 27, 2001

Group

1714

Examiner

Cephia D. Toomer

## Entity

☐

Large

☒

Small

Date Filed

November 27, 2001

Applicant's attorney requests that the date for responding to the Office Action dated January 15, 2003

be extended for one month(s) to and including

May 15, 2003

### Large Entity

### Fee

### Small entity

### Fee

☐1<sup>st</sup> mo. ext.

110

☒1<sup>st</sup> mo. ext.

55

☐2<sup>nd</sup> mo. ext.

410

☐2<sup>nd</sup> mo. ext.

205

☐3<sup>rd</sup> mo. ext.

930

☐3<sup>rd</sup> mo. ext.

465

☐4<sup>th</sup> mo. ext.

1,450

☐4<sup>th</sup> mo. ext.

725

The applicable fee is set forth above. The Patent and Trademark office is authorized to charge any deficiency or apply any overpayment credit to **Deposit Account No. 23-3030**.

Respectfully Submitted,

By



Quentin G. Cantrell

Reg. No. 47,469

Woodard, Emhardt, Moriarty, McNett &amp; Henry LLP

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## First Class Mail

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Quentin G. Cantrell

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Date of Signature

May 15, 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:	)	
	)	Before the Examiner
Harold L. Bennett	)	
	)	Cephia D. Toomer
Serial No. 09/994,560	)	
	)	Group Art Unit 1714
Filed: November 27, 2001	)	
	)	
IMPROVED PROCESS FOR PRODUCTION	)	
OF LOW TEMPERATURE CHAR	)	
DURING PRODUCTION OF LOW	)	
TEMPERATURE TARs	)	May 15, 2003

**AMENDMENT UNDER 37 CFR § 1.115**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

In response to the Office Action dated January 15, 2003, please enter the following amendments and consider the following remarks:

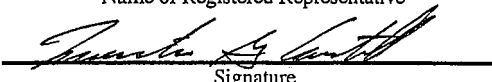
**INTRODUCTION**

Claims 1-21 are pending in the application, and have been rejected or objected to in the Final Office Action. Applicant enters the following Amendment in order to place the Claims which the Examiner has identified as being directed to patentable subject matter into a condition for allowance.

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Quentin G. Cantrell

Name of Registered Representative



Signature

May 15, 2003

Date of Signature

## IN THE CLAIMS

Please amend the Claims as follows:

1. (Presently amended.) A method for preparing carbon-derived char comprising the steps of:
  - (a) providing a carbonaceous precursor material;
  - (b) lowering the agglomeration value of the carbonaceous precursor material through the addition of inert organic matter;
  - (c) raising the percentage of volatiles in the carbonaceous precursor material to prevent agglomeration and caking;
  - (d) roasting the carbonaceous precursor material for between about 2 hours and about 4 hours in a multi-hearth roaster including a plurality of decks constructed of non-corrosive metal with high-heat transfer characteristics, with the ability to move a thin layer to material with rotating arms equipped with plow-shaped protrusions, in a substantially anaerobic environment at a roasting temperature between about 300 and 700 degrees Celsius; [and]
  - (e) cooling the resultant solid char[.];
  - (f) after step (d) and before step (e) extracting tar gases;
  - (g) before step (e) filtering the tar gases; and
  - (h) before step (e) washing the tar gases.

2. (Cancelled.)
3. (Cancelled.)
4. (Cancelled.)
5. (Cancelled.)
6. (Currently Amended) The method of claim 1 [5 wherein the roaster further includes a plurality of decks constructed of non-corrosive metal with high-heat transfer characteristics,] wherein each deck includes floor supports and ceilings formed from thin-shelled reinforced concrete double-wall construction.
7. (Original) The method of claim 6 wherein the roaster further includes a number of outside walls and wherein each outside wall has at least one port adapted to provide anaerobic access to the roaster.
8. (Presently Amended) The method of claim [2] 1 wherein step (f) includes the use of injected steam to assist in the removal of the tar and producer gases.
9. (Presently Amended) The method of claim 1 further comprising the step of after step (a) and before step (d) adding a carbonate acceptor material to facilitate sulfur removal.
10. (Presently Amended) The method of claim 1 wherein step (e) further includes depositing the resultant solid char in an inverted cone-shaped bin and injecting steam thereinto.

11. (Presently Amended.) A low-emission solid carbonaceous fuel produced by the following process steps:
- a) providing a carbonaceous precursor material;
  - b) lowering the agglomeration value of the carbonaceous precursor material through the addition of inert organic matter;
  - c) raising the percentage of volatiles in the carbonaceous precursor material to prevent agglomeration and caking;
  - d) roasting the carbonaceous precursor material for between about 2 hours and about 4 hours in a multi-hearth roaster including a plurality of decks constructed of non-corrosive metal with high-heat transfer characteristics, with the ability to move a thin layer to material with rotating arms equipped with plow-shaped protrusions, in a substantially anaerobic environment at a roasting temperature between about 300 and 700 degrees Celsius; [and]
  - e) cooling the resultant solid char[.];
  - f) after step (d) and before step (e), extracting tar gases;
  - g) before step (e), filtering the tar gases; and
  - h) before step (e) washing the tar gases.
- 
12. (Cancelled.)
13. (Cancelled.)
14. (Cancelled.)
15. (Cancelled.)

16. (Currently Amended.) The method of claim 11 [15 wherein the roaster further includes a plurality of decks constructed of non-corrosive metal with high-heat transfer characteristics,] wherein each deck includes floor supports and ceilings formed from thin-shelled reinforced concrete double-wall construction.
17. (Original) The method of claim 16 wherein the roaster further includes a number of outside walls and wherein each outside wall has at least one port adapted to provide anaerobic access to the roaster.
18. (Currently Amended) The method of claim [12] 11 wherein step (f) includes the use of injected steam to assist in the removal of the tar gases.
19. (Presently Amended) The method of claim 11 further comprising the step of after step (a) and before step (d) adding a carbonate acceptor material to facilitate sulfur removal.
20. The method of claim 11 wherein step (e) further includes depositing the resultant solid char in an inverted cone-shaped bin and injecting steam thereinto.
21. (Cancelled.)



### **REMARKS**

The office action identified Claims 6-8 and 16-18 as being directed to patentable subject matter, but objected to them as being dependent upon rejected claims.

Claim 1 has been re-written herein to include all of the limitations of Claim 6, with the exception of "each deck includes floor supports and ceilings formed from thin-shelled reinforced concrete double-wall construction." Because the plurality of decks is nowhere taught or suggested in the prior art, it is respectfully submitted that this limitation is not required to place Claim 1 in condition for allowance. This limitation has been retained in Claim 6, which now depends directly from Claim 1.

Claims 9 and 10 depend from Claim 1, and therefore include each of its limitations. It is therefore respectfully submitted that they are in a condition for allowance.

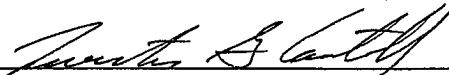
Claim 11 has been amended, analogously to Claim 1, to include all of the limitations of Claim 16, except "each deck includes floor supports and ceilings formed from thin-shelled reinforced concrete double-wall construction." Similarly, Claim 16 retains this limitation in a dependent claim. Also analogously, Claims 19 and 20 are believed to be in a condition for allowance because of the new limitations added herein to the claim from which they depend.

## CONCLUSION

For the foregoing reasons, Applicant submits that all claims are in a condition for allowance, and respectfully requests a Notice of Allowance for all pending claims.

No fees are believe to be necessary. Nevertheless, the Commissioner is hereby authorized to charge any fees due, including statutory fees for extensions of time, to Deposit Account No. 23-3030, but not to include any payment of issue fees.

Respectfully submitted,

By 

Quentin G. Cantrell

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**FAX COVER SHEET**

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TO: Patent and Trademark Office  
Attn: Examiner Cephia D. Toomer  
Group Art 1714  
FAX TELEPHONE NO.: 703-746-4176

FROM: Quentin G. Cantrell  
DATE: May 15, 2003

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PRIMARY FAX number: (317) 637-7561  
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SPECIAL REMARKS: App No. -09/994,560 (Our Dkt No. 31088-2)

**Transmittal Form**

**Fee Transmittal Form**

**Request For Extension Of Time**

**Amendment Response to Final Office Action.**

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**WOODARD, EMHARDT, NAUGHTON, MORIARTY & MCNETT**

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Fax 317-637-7561**

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